



Groundwater Protection and Water Wells Workgroup Meeting

Wednesday April 24, 2013

Hosted by the DEC

1st floor conference room 555 Cordova St. Anchorage with teleconference

Attendees in Anchorage:

Kathy Kastens (DEC-statewide), Chris Miller (DEC-DW Protection-statewide), Charley Palmer (DEC-DW Protection-statewide), Rebecca Baril (DEC-DW Protection-statewide), Fred Sorensen (UAF-CES-statewide), Wayne Westberg (WWC), Kris Westberg (WWC), Elizabeth Rensch (Certified Laboratory), Bill Kranich (PWS Owner - Southcentral).

Attendees via teleconference line:

Roy Robertson (DEC-DW Engineering-Mat-Su), Milo Pitner (WWC), Jim Munter (Hydrogeologist/Consultant), Larry Swihart (WWC), Lee Ice (WWC-Fairbanks), Barbara Roberts (PWS Owner - Kenai), John Craven (PWS Owner-Fairbanks), Craig Seime (WWC), Rick Kraxberger (WWC – Kenai), Dave Bay (WWC), Alyssa Murphy (DEC – Soldotna).

Absentees:

Ted Schacle (WWC), Dan Brotherton (WWC),

Meeting Minutes

Facilitator: Kathy Kastens (DEC)

Introduction

- Go to Meeting software check
 - Sorry for the kinks, we had WebEx pulled from State use unexpectedly.
- Roll Call (19 in attendance)
- General Housekeeping
 - General agreement that at the beginning of the meeting, after minutes are approved, the workgroup will review action items created from the previous meeting.
- Action Items from last meeting (March 27th)
 - Kathy presented a tentative document of criteria for determining the validity of an action item and potential action outcomes.
 - This document is up for discussion we will distribute and allow for comments
 - At the last meeting DEC – Drinking Water (DW) agreed to speak with the Division of Water (DOW) to gain information on how the as-builts containing septic site plans are obtained and stored. The DEC also discussed the current

availability of this information to the public..Chris Miller explained that the DOW has an online database called SEPTS (Septic Tracking System), that gives access to as-builts for conventional plan sites producing less than 500 gallons per day. It is slightly inconsistent and incomplete, but is easily accessible and a resource for good data. There is a standard checklist between offices for workflow, but due to lack of collaboration with the local governments, there is missing information for some systems. He then asked if this was a resource that we would want to pursue for future action?

- Bill Kranich pointed out that a site visit will always be the most complete accurate source of information for site plans.
- Kathy agreed on this point and mentioned that it had been said at the last meeting as well. She proposed the idea of recommending a GIS system of all the septicics.
 - There was concern as to whether there is anyone who has the resources to do that at the present moment.
- Action Item: Establishing a website type system to collaborate resources and materials for the workgroup meetings (in lieu of constant emails).
 - Chris had done some research and the last quote he got from IT was \$60 per user for a Sharepoint site. Currently, the other option we are using is Google Drive which is free and is open to the public (no need for a google account). **To access this site click [here](#)**
 - It was suggested to compile all the information for well owners, land developers, local governments etc. to be able to reference.
 - Kathy asked for everyone to review the documents and send any other documents you may find. Send documents to Chris Miller (chris.miller@alaska.gov) or Rebecca Baril (rebecca.baril@alaska.gov) and they will get them posted. (Wayne Westberg provided a wealth of paper pamphlets and documents, we will work on either finding the online document or scanning them in.) We will also need to determine the best way to distribute this information to the public after we have collaborated and reviewed it.
 - Fred Sorenson brought up that many people looking up this information are “information savvy” and we should make sure this information is current (i.e., nothing from the 80’s) and relevant to current technology.
 - Kathy brought up the idea of creating a scoring sheet for these documents that will allow the group to rate and provide opinions on the materials we have compiled.
- Action Item: Compile water rights application process from DNR
 - Charley Palmer spoke with DEC DW Engineering group and the DNR. He is currently waiting for more information to ensure accuracy. The current general summary is that when a PWS is seeking construction approval there is a checklist that the applicant must follow. For groundwater sources, it requires

that an application for water rights is submitted to DNR for Community and Non-Community Water Systems (CWS/NCWS).

- Bill Kranich asks if that applies only to those obtaining a “significant” amount from their source.
- Charley **read the DNR regulations for required systems that must apply for water rights: “(1) the consumptive use of more than 5,000 gallons of water from a single source in a single day; (2) the regular daily or recurring consumptive use of more than 500 gpd from a single source for more than 10 days per calendar year; (3) the non-consumptive use of more than 30,000 gpd (0.05 cubic feet per second) from a single source; or (4) any water use that may adversely affect the water rights of other appropriators or the public interest.** “This definition captures the majority of the smaller systems. Plan approval proceeds after water rights are submitted (verified by proof of payment to DNR). Engineering continues to allow other agencies that are dependent on the approval to continue moving. “Preferred” applications can receive priority/preference, but he is unaware what that may equate to as far as a timeline goes. Once the DNR begins processing, they circulate the permit for agency review. At this point the DEC DW receives the permit for review, but the plan review process may already be over. If there are gaps in this process we are going to try to address them. Charley will have DEC and DNR review the information he has collected to ensure accuracy.
- Wayne Westberg asked where in the checklist is there an assurance for enough water.
 - Roy Robertson responded that the DEC requires that all design calculations to prove tha the system will be able to provide water forever. If it is a CWS, it cannot receive approval without proof of the ability to provide the water.
 - Further discussion then clarified that the calculations are performed by a private Professional Engineer (PE). The groundwater source checklist requires proposed test pumping methods. A DEC DW Engineer then reviews the calculations. The DEC typically requires a minimum 24 hour flow test or stabilize at 1.5 times the design demand It was then asked how situations like the Field of View Subdivision can occur when there are supposed to be calculations performed by A PE and reviewed by the DEC.
 - Discussion occurred that a 24 hour flow test might not be adequate enough depending on case by case specificis and might need to be longer (i.e. 48 or 72 hour pump tests)

- Kathy responded that the DEC DW program is aware that we need to take a stronger stand on the quantity issue. There is a breakdown occurring from when the well is drilled to when it actually becomes a certified PWS. The workgroup needs to provide a recommendation to the DW program as to how to fix this issue. There are also surrounding issues, like not checking water rights, possible breakdown of communication from water well drillers, and issues with the PE performing inspection and calculation.
- Bill Kranich addressed that there needs to be progressive rigor on the production testing of the source. He used examples to clarify that there should possibly be more extensive testing for sources that are closer to the minimum standard.
 - Kathy verified that strengthening the pump test requirements could be part of the solution.
 - Wayne Westberg stated that engineers are hired by developers to create something to sell and that there may be some “creative math” happening on their end. He suggested some training for DEC staff to catch these discrepancies, increased specifications, and an increase in engineer quality.
- Kathy summarized this action item with a statement that we all need to come to the table and not be too defensive of our own groups. We are all here to protect groundwater, and we all need to be willing to assume some responsibility. The DNR water rights information will be reviewed by the workgroup once all information has been compiled.
- Action Item: Survey to ASDWA to get information from other areas as to their answers on some of our issues.
 - Charley stated that 36 states and one province responded. We are currently allowing a little extra time for Arizona and Texas to respond.
 - Chris mentioned that we also contacted the National Ground Water Association (NGWA) for more information.
 - The discussion of the question about “certifying” wells was then brought up.
 - Wayne mentioned that this could be a shaky question.
 - Kathy clarified that this question originated from a lot of questions the DEC receives from financial institutions.
 - Charley summarized the results that many defer this determination to county health departments that require sampling. Alabama requires professional engineers to certify wells. In our issues the engineers don’t have anything to reference. Many states deferred to the primacy agency for their state.

- A side note was made at this point that we are still talking about private AND public wells
 - We are still awaiting a few responses and will provide the final summary
- Action Item: DEC will survey local governments for any standards or requirements for well construction.
 - The DEC has not had a chance to survey any government offices yet.
 - The DEC would gladly accept anyone who has some good contact information for people we can talk to about this.
 - Mostly concerned with boroughs but also those that are unincorporated.
 - Barbara Roberts mentioned Keith Snarny in Kenai is a good contact for Kenai Borough land management office.
- **Issues**
 - Recap of last meeting
 - Bill Kranich asked, although he has no recommendation, what is being done about known contamination plumes. He also asked whether contaminated sites are at all considered with a PWS.
 - Chris Miller clarified that, currently, Alaska cannot identify plumes, just contaminated sites. The state does not currently have the resources or information to map plumes.
 - Roy Robertson also explained that all PWS are required to have a map of potential sources of contamination within 500 feet of a source. (This was clarified to be only for systems undergoing an engineering plan review)
 - Fred Sorenson mentioned that the maps of potential sources of contamination would be a good resource for potential private or public water system owner, and to ensure that these maps are easy to find and use.
 - Issue: Lending institutions need to know if a well is “certified” during property transactions.
 - Wayne Westberg clarified that if there is a lending institution involved, it is required for an engineer to check the well and septic.
 - Clarification was made that, in the context the workgroup is currently concerned about, certify indicates that the well was built to a standard. Certifying is just ensuring that a well was built properly.
 - Wayne noted that in the MOA there is an on-site inspection in any transaction. A “certificate of occupancy” requires inspection.
 - Kathy also noted that if there is no lending institution involved, it isn’t required. Part of the educational component could be informing the public of this so that they can consider having it done.

- It was mentioned that this could be wrapped into recommendations to local government, or wrapped into the educational component.
- There was discussion on what was required for inspection.
 - The inspector is required to be a PE.
 - The inspection requires a visual physical evaluation.
 - E. Coli. and Nitrate testing is required, and some areas require more (i.e., MOA requires Arsenic – but there is no standard for levels, just an informational packet to interpret the results).
- Discussion was brought up that the DEC is there to protect public health, and providing educational components may not be enough. It was argued that the only other option is permitting, which the group as a whole is not ready for.
- A few workgroup members questioned whether there was evidence that there are problems across the state.
 - Members of the DEC mentioned that we do have documentation of wells that are regulated and their problems, which can only be assumed to be a small representation of what is occurring across the state that we are unaware of.
 - It was also expressed that there isn't always a good way to identify the source of contamination, such as in lack of grouting.
 - A few of the WWC's discussed that they have learned how to deal with some contamination issues, such as grouting in shallow bedrock.
- This lead into a discussion of tracking, and how to set up an inner tracking mechanism for the workgroup. This will allow the entire workgroup to have a grasp of the magnitude of the issues.
 - Wayne brought up that there hasn't been many issues that they haven't been able to solve with grouting.
 - Kathy agreed, but also mentioned that he isn't a statewide driller, and there are some situations where those involved may not be as educated or experienced.
 - Discussion continued as to the best way to track and collect issues.
 - It was agreed to be strictly workgroup internal, and that opening it to the public will allow for some unwanted complaints that aren't actual issues.
- Wayne Westberg posed the question to the DEC as to whether they perform any tracking or monitoring.
 - The DEC regulates 1500 PWSs and currently there is no formal monitoring or tracking
 - Charley added that trending of sampling results for PWSs is taken into considered when assigning risk rankings in the Source Water Assessment.

- Meeting wrap up – Agreed on next meeting to be May 22nd 6-8pm.

Action Items:

- **Brainstorm tracking issues. How to track, how to compile. Who will hold the files?**
- **Criteria for Action Items – to be distributed and discussed**
- **Spreadsheet of educational items in order for workgroup members to provide input and opinion**
- **DEC – Talk to local government about their standards**
- **DEC - Speak with Kathy Butcher NGWA**
- **The DEC was asked to compile some barebone standards for domestic well construction that could possibly be used for a baseline throughout the state.**
- **Kathy – Add column to issues to allow for rolling action**
- **Wayne – get the “certificate of occupancy” documentation so we can take a look at it**

REMINDER: Next meeting is Wednesday May 22nd, 2013 6:00pm – 8:00pm